

**FIG. 1**  
**(Prior Art)**

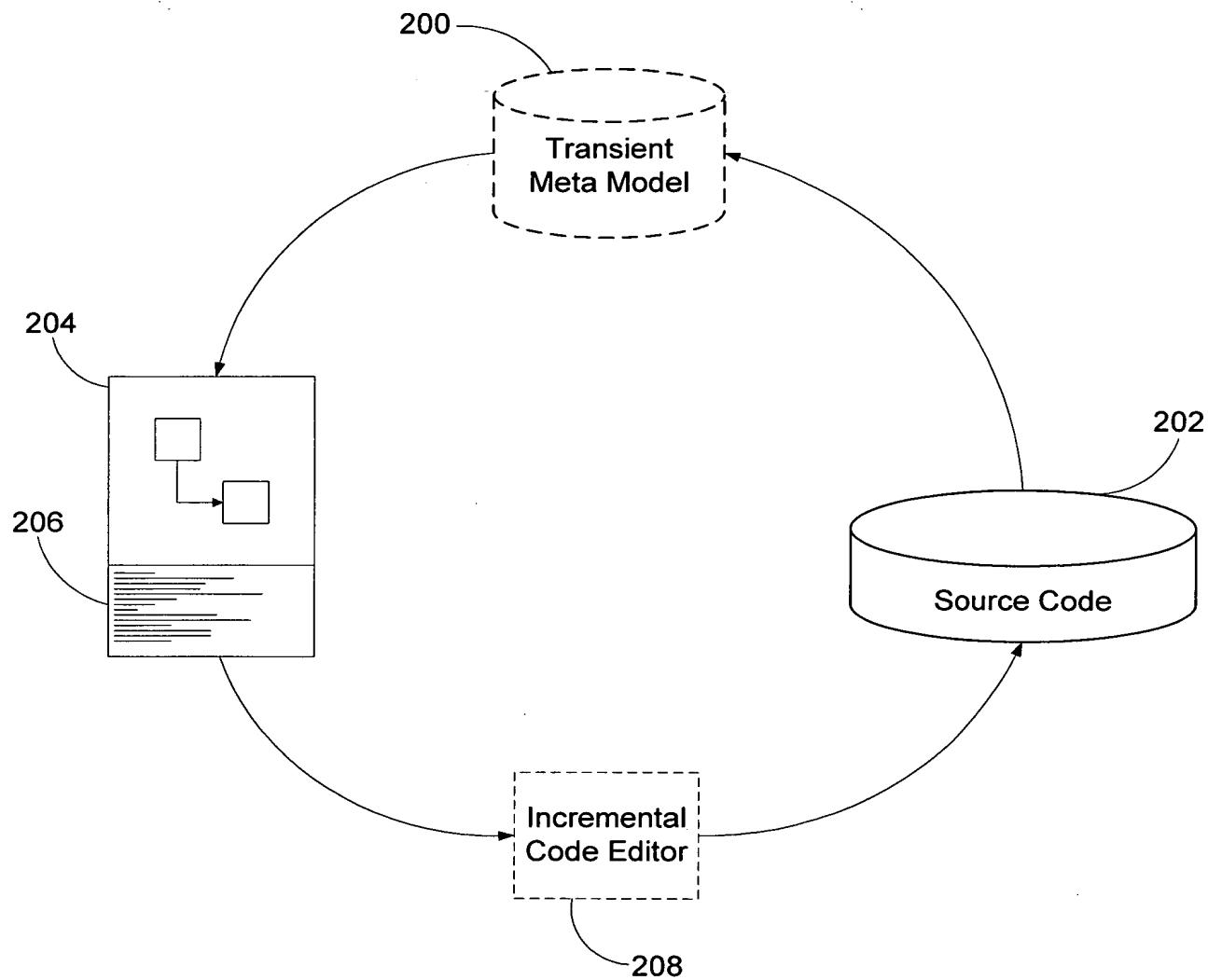


FIG. 2

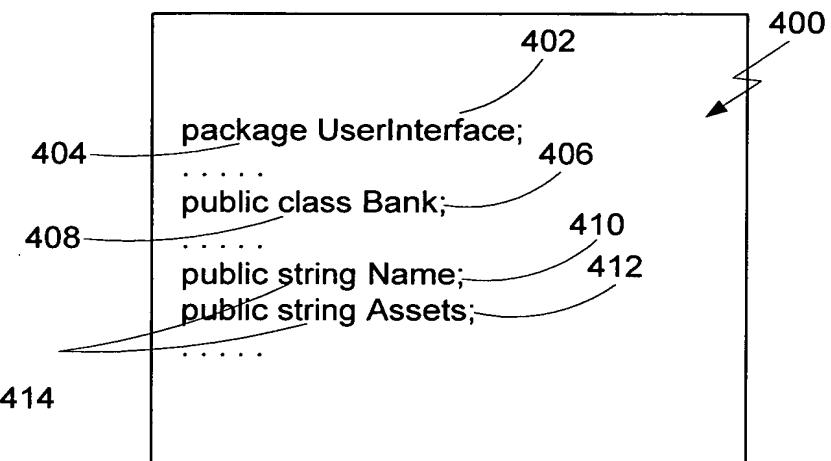
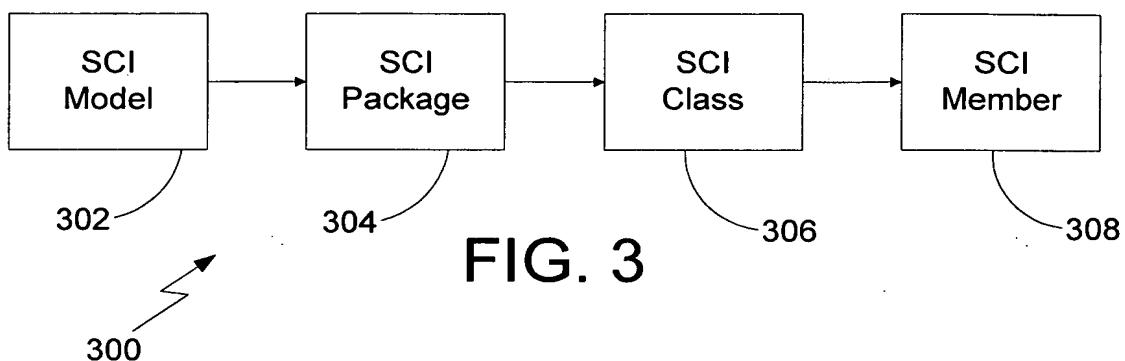
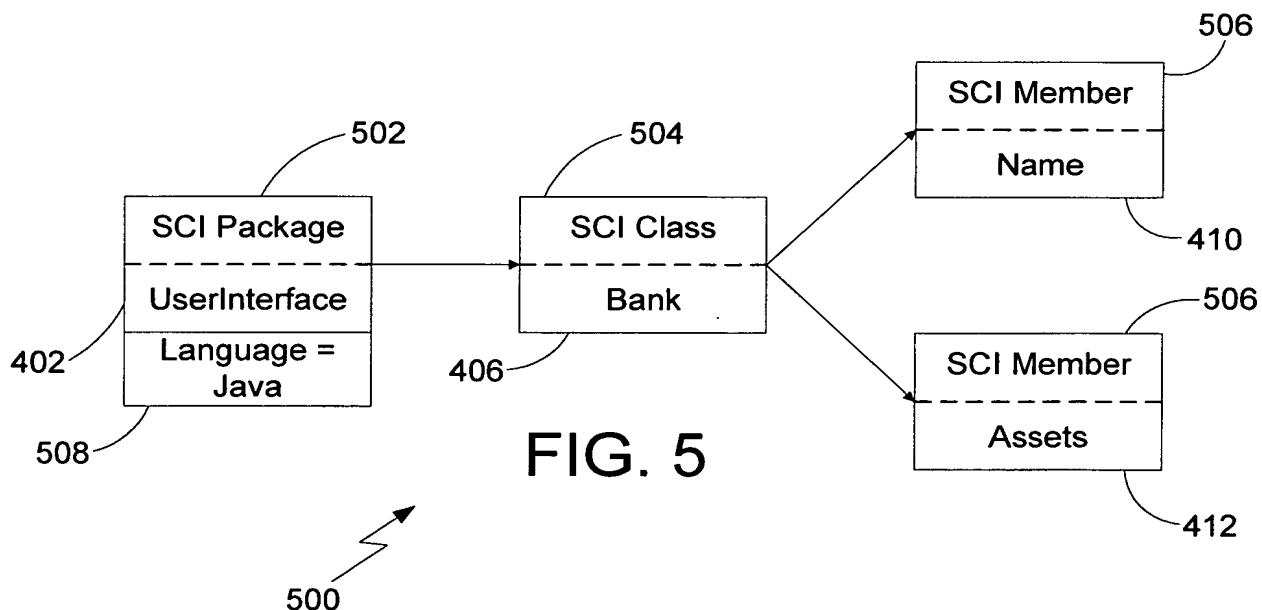


FIG. 4



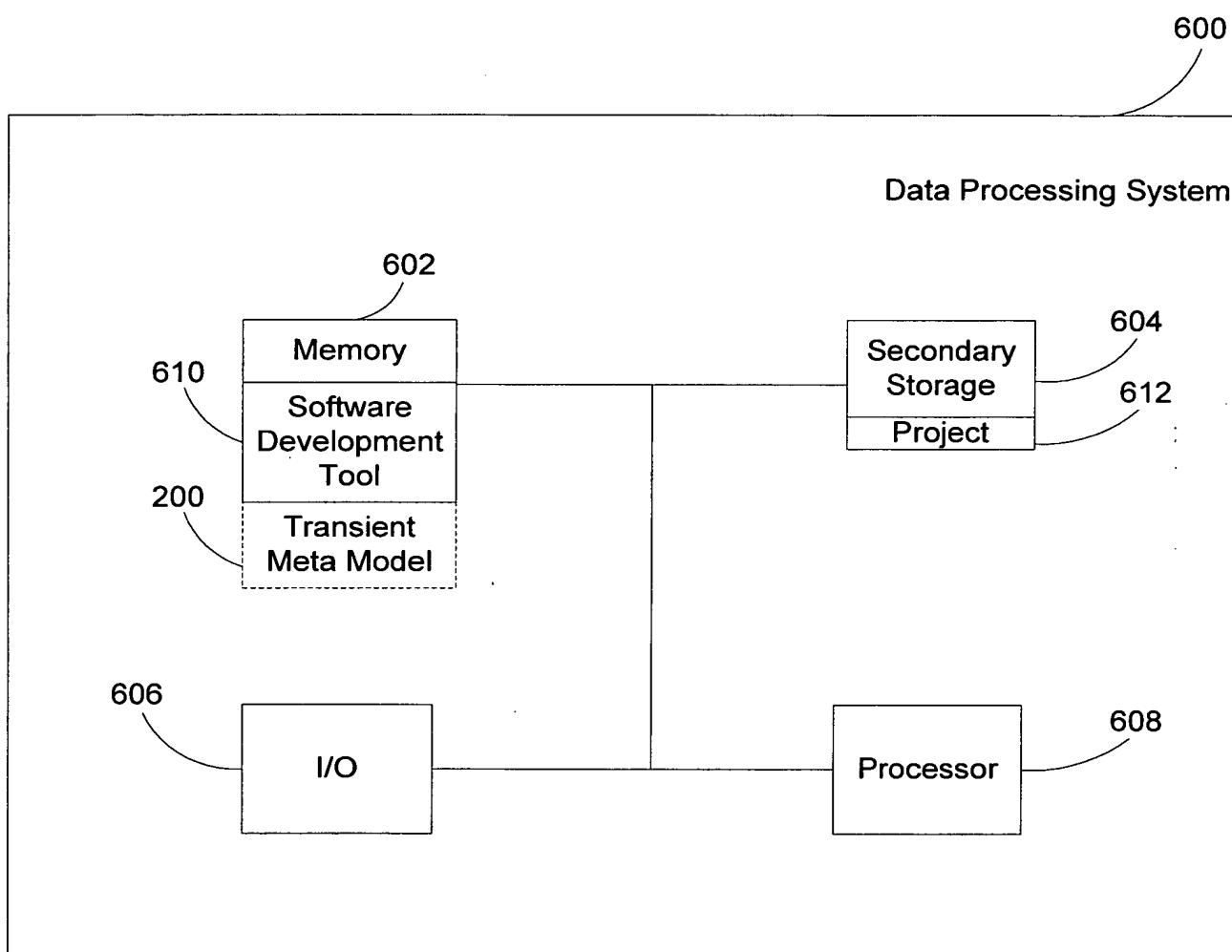
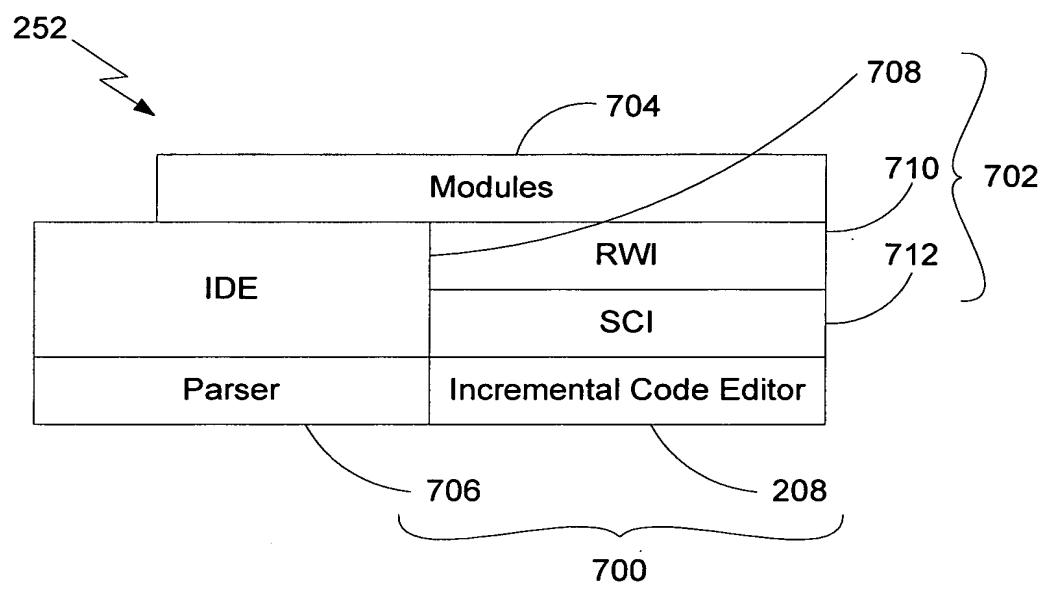


FIG. 6



**FIG. 7**

QA Audit

Title	Abbreviation	Chosen
Coding Style		<input checked="" type="checkbox"/>
Access Of Static Member's Through Objects	AOSMTO	<input checked="" type="checkbox"/>
Assignment To Formal Parameters	ATFP	<input checked="" type="checkbox"/>
Complex Assignment	CA	<input checked="" type="checkbox"/>
Don't Use The Negation Operator Frequently	DUNOF	<input checked="" type="checkbox"/>
Operator '?' May Not Be Used	OMNBU	<input checked="" type="checkbox"/>
Provide Incremental In For-Statement or use w...	PIIFS	<input checked="" type="checkbox"/>
Replacement For Demand Imports	RFDI	<input checked="" type="checkbox"/>
Use Abbreviated Assignment Operator	UAAO	<input checked="" type="checkbox"/>
Use 'this' Explicitly To Access Class Members	UTETACM	<input checked="" type="checkbox"/>
Critical Errors		<input checked="" type="checkbox"/>
Avoid Hiding Inherited Attributes	AHIA	<input checked="" type="checkbox"/>
Avoid Hiding Inherited Static Methods	AHISM	<input checked="" type="checkbox"/>
Command Query Separation	CQS	<input checked="" type="checkbox"/>
Hiding Of Names	HON	<input checked="" type="checkbox"/>
Inaccessible Constructor Or Method Matches	ICOMM	<input checked="" type="checkbox"/>
Multiple Visible Declarations With Same Name	MVDWSN	<input checked="" type="checkbox"/>
Overriding a Non-Abstract Method With an Ab...	ONAMVAM	<input checked="" type="checkbox"/>
Overriding a Private Method	OPM	<input checked="" type="checkbox"/>

Severity: High

800  
802

Select all Unselect all Set defaults Save set As Load set...

**AOSMTO - Access Of Static Members Through Objects** 804

Static members should be referenced through class names rather than through objects.

Start Cancel Help

FIG. 8A

806

Title	Abbreviation	Chosen
Complex Assignment	CA	<input checked="" type="checkbox"/>
Don't Use the Negation Operator Frequently	DUNOF	<input checked="" type="checkbox"/>
Operator '?' May Not Be Used	OMNBU	<input checked="" type="checkbox"/>
Provide Incremental In For-Statement or use w...	PIIFS	<input checked="" type="checkbox"/>
Replacement For Demand Imports	RFDI	<input checked="" type="checkbox"/>
I Use Abbreviated Assignment Operator	UAAO	<input checked="" type="checkbox"/>

Severity:

Select all    Unselect all    Set defaults    Save set As...    Load set...

808

**CA - Complex Assignment**

Checks for the occurrence of multiple assignments and assignments to variables within the same expression. Too complex assignments should be avoided since they decrease program readability.

**Wrong**

```
// compound assignment
i *= j++;
k = j = 10;
l = j += 15;
// nested assignment
i = j++ + 20;
i = (j = 25) + 30;
```

810

**Tip:** Break statement into several ones.

Start    Cancel    Help

FIG. 8B

806

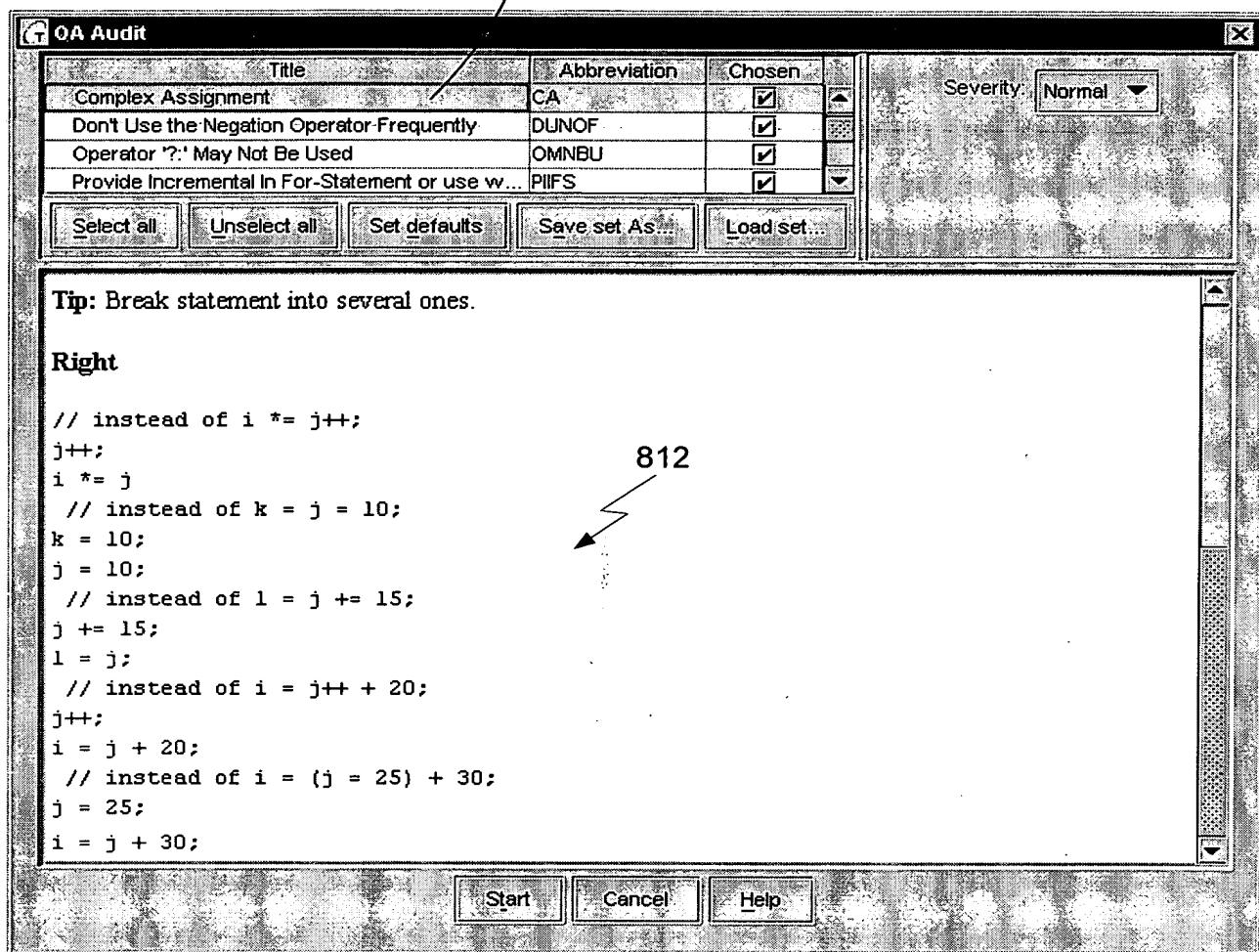


FIG. 8C

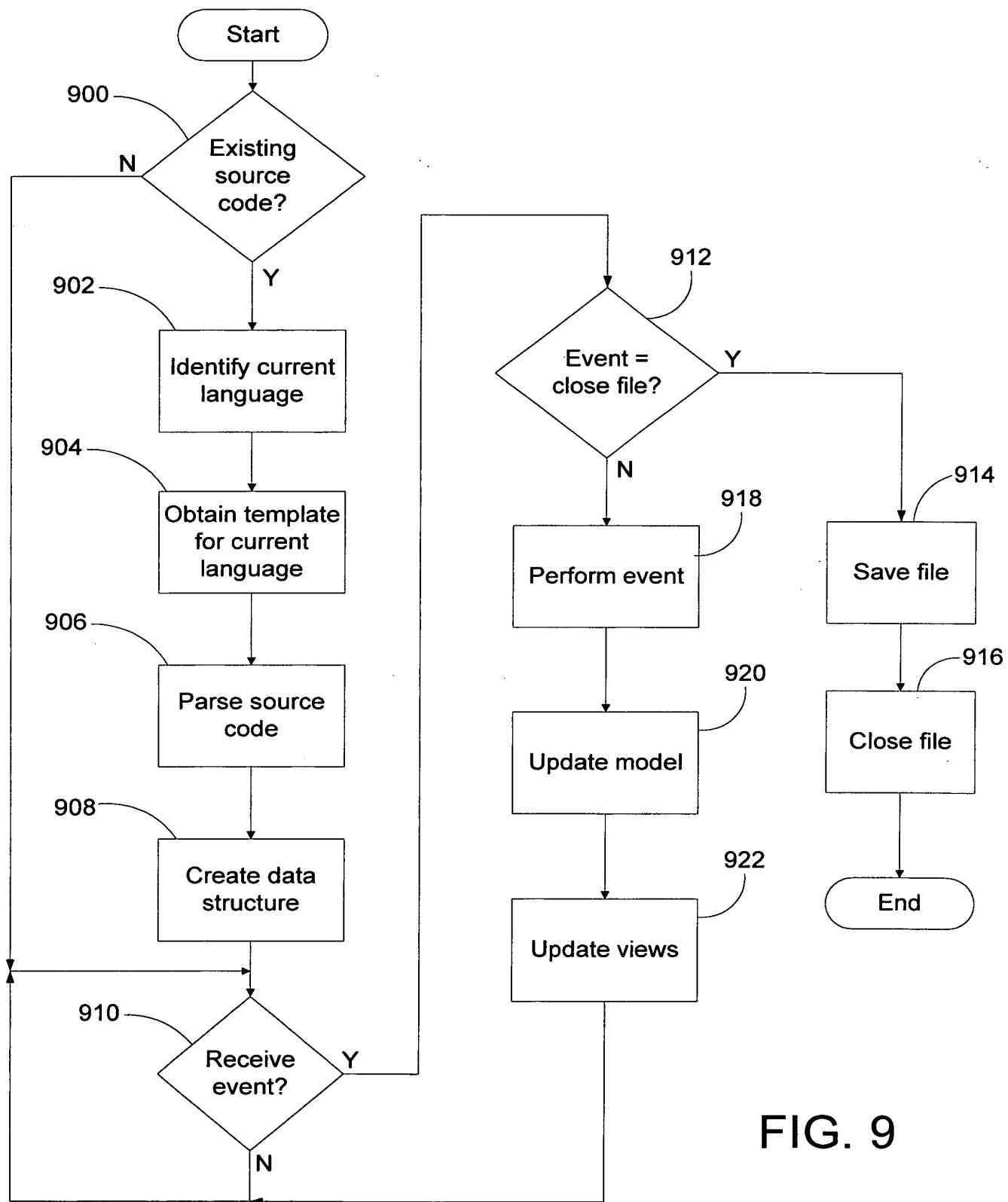


FIG. 9

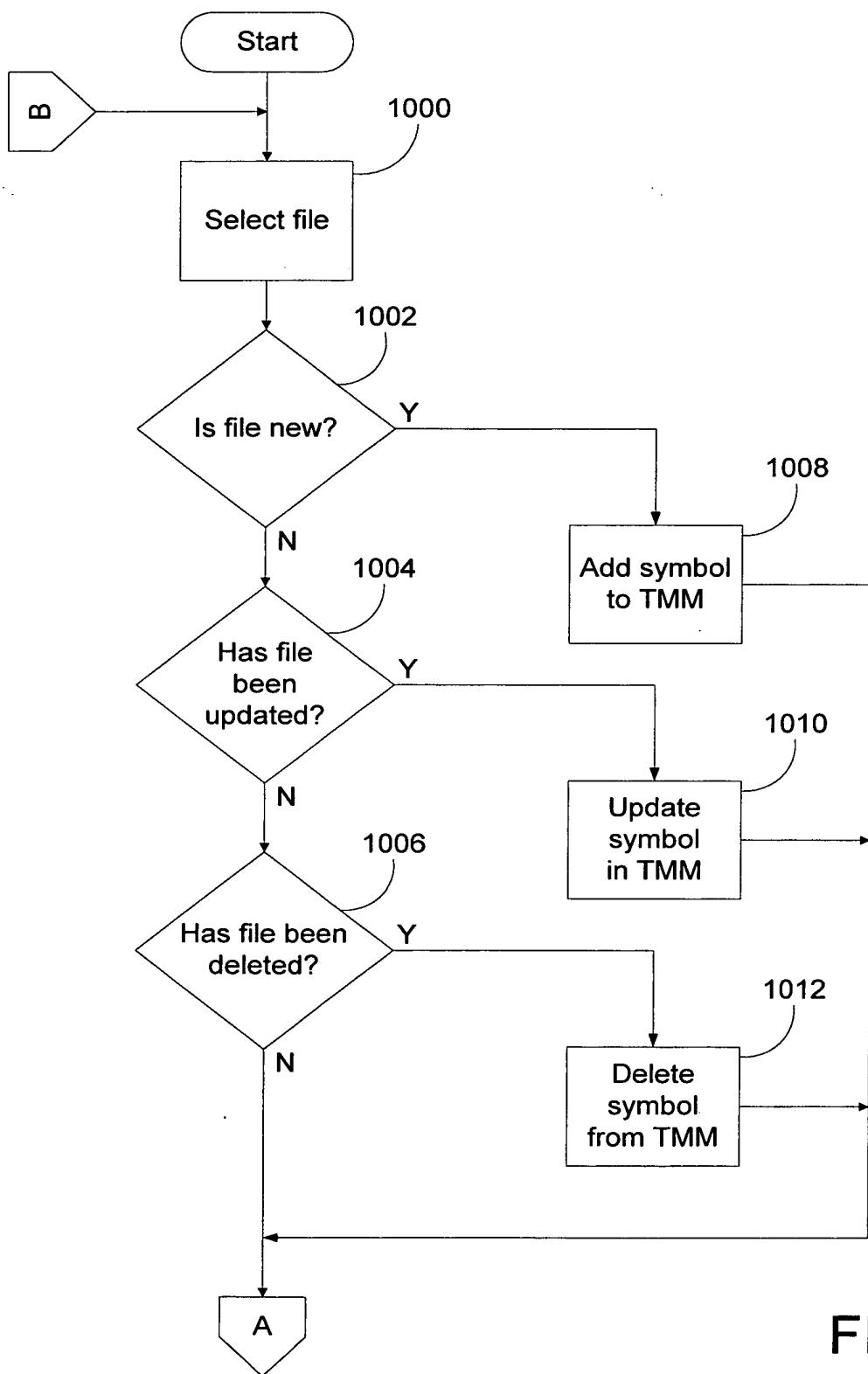


FIG. 10A

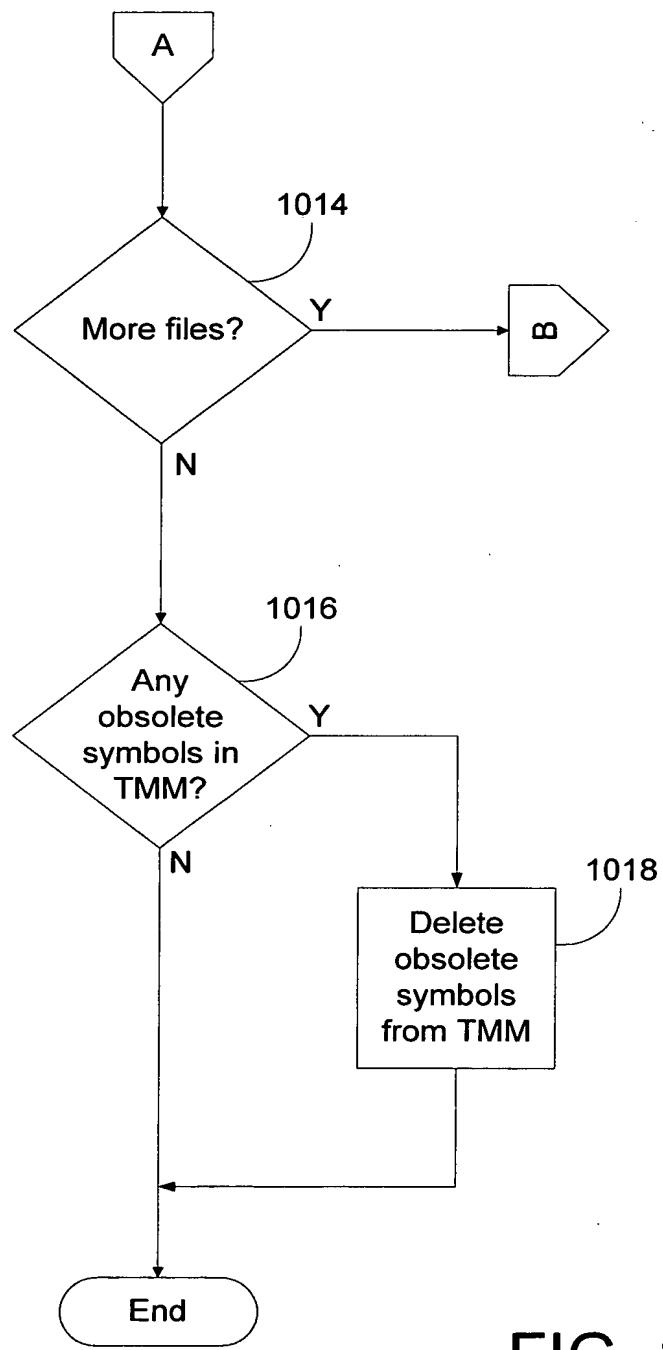


FIG. 10B

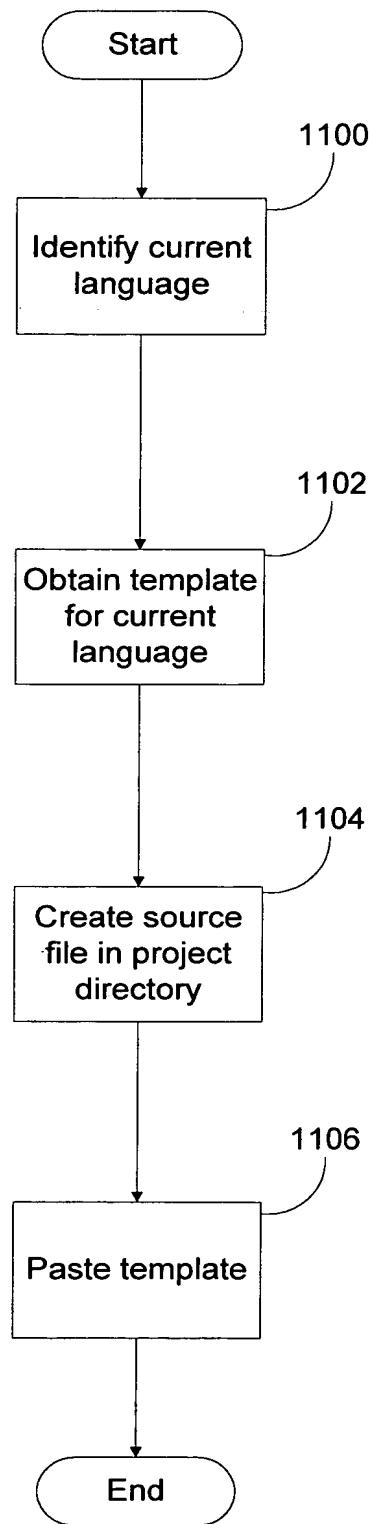


FIG. 11

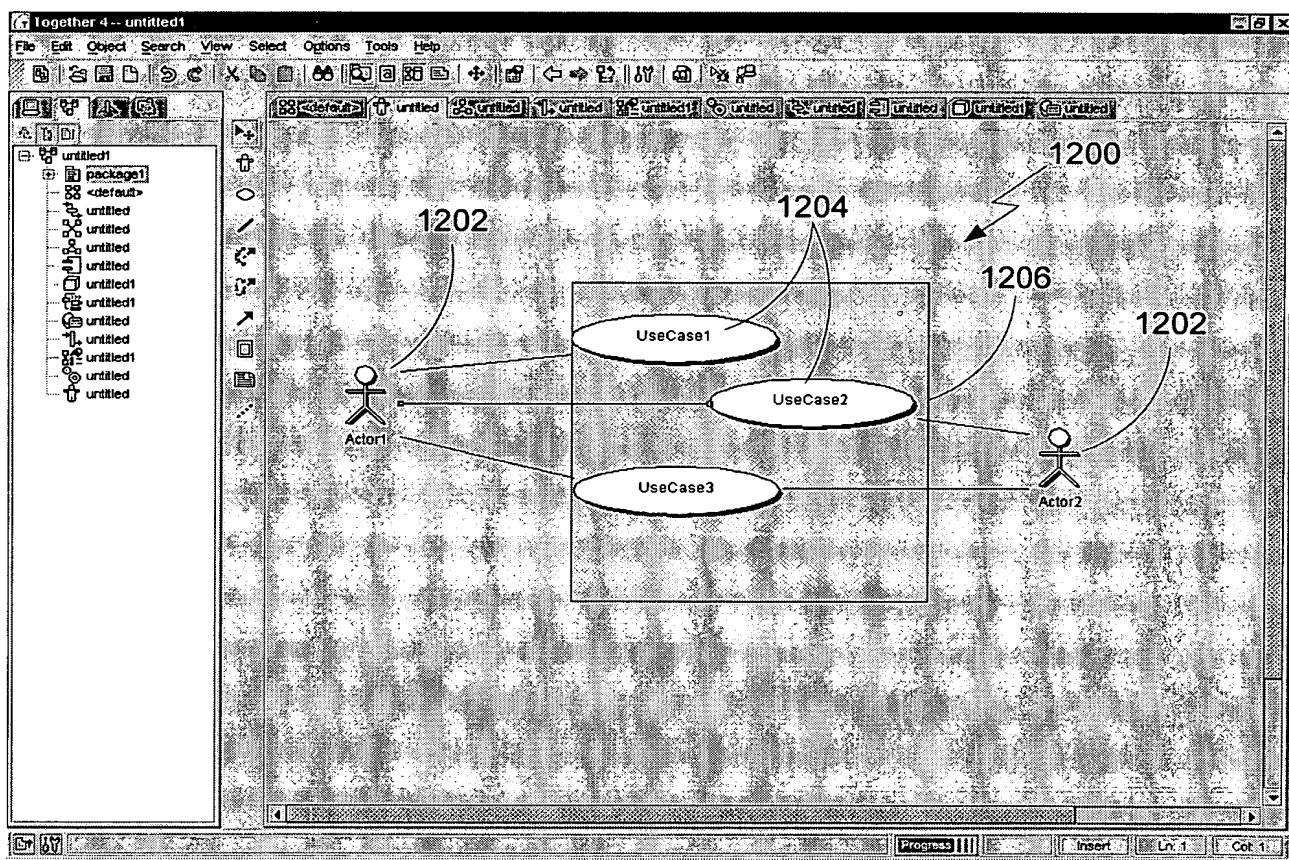


FIG. 12

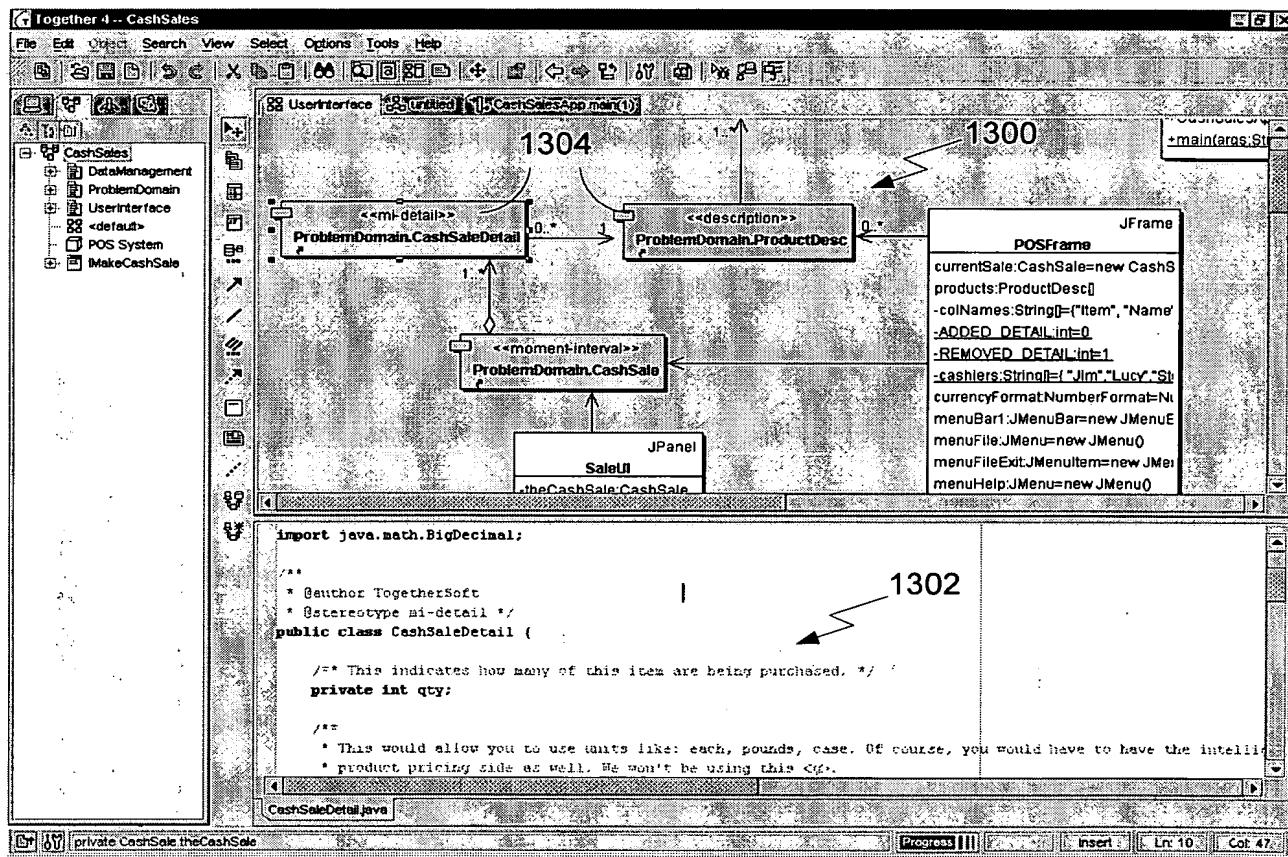


FIG. 13

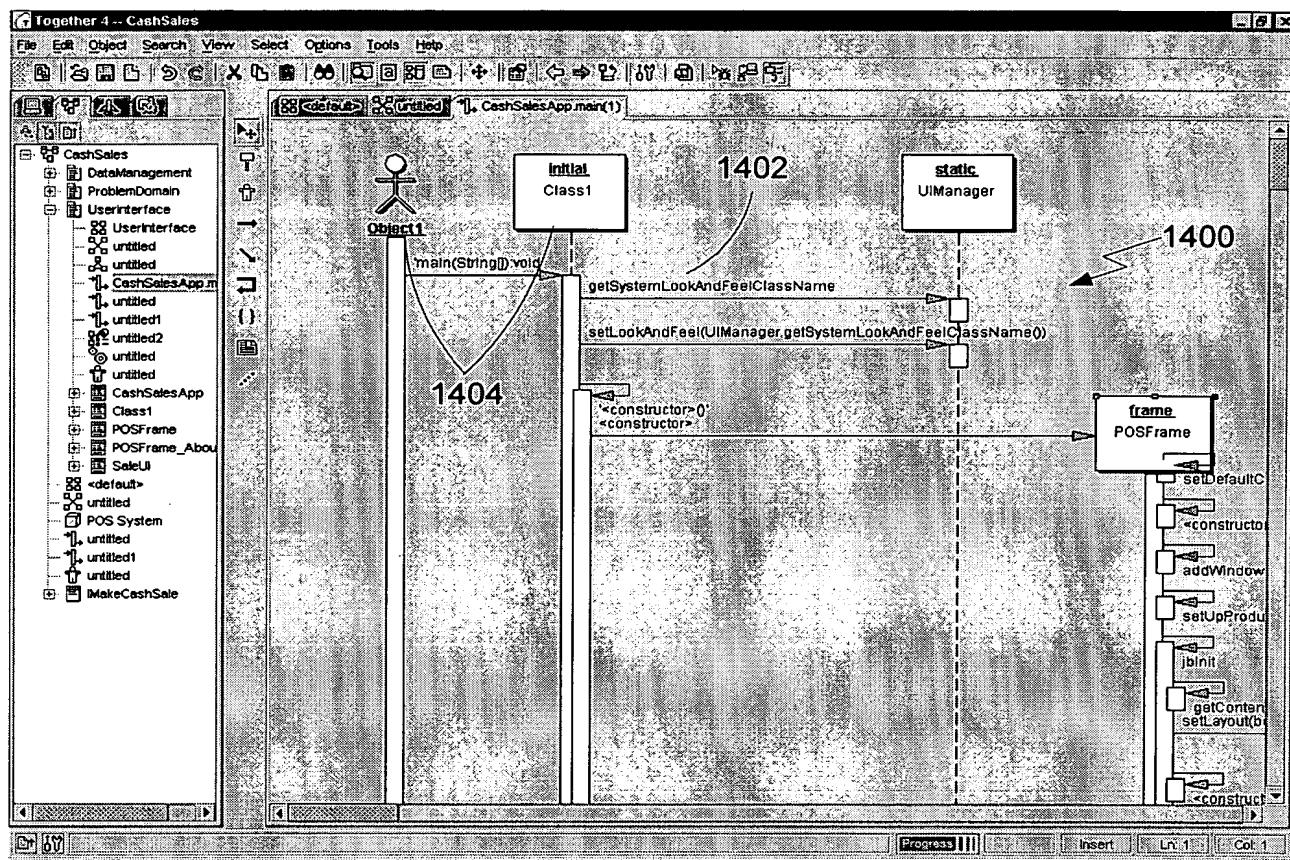


FIG. 14

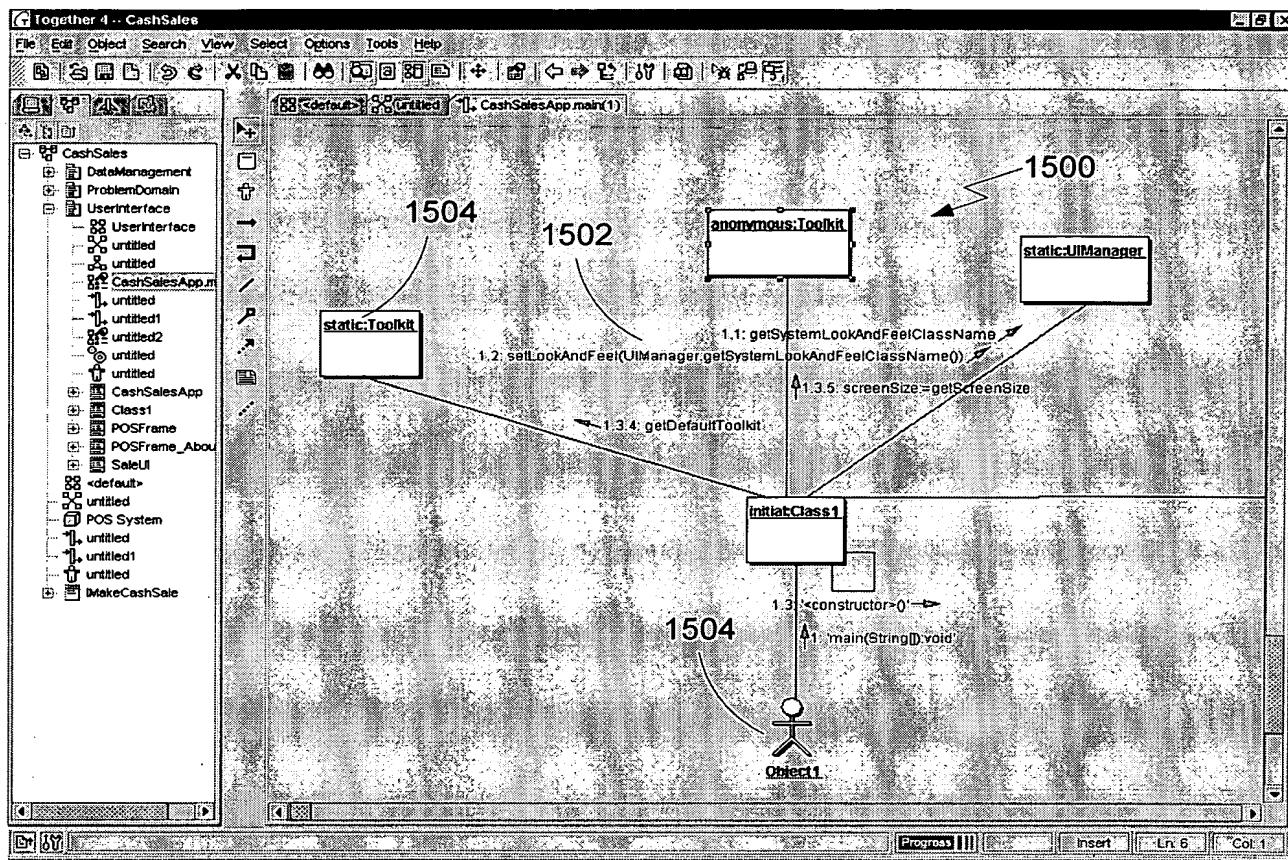


FIG. 15

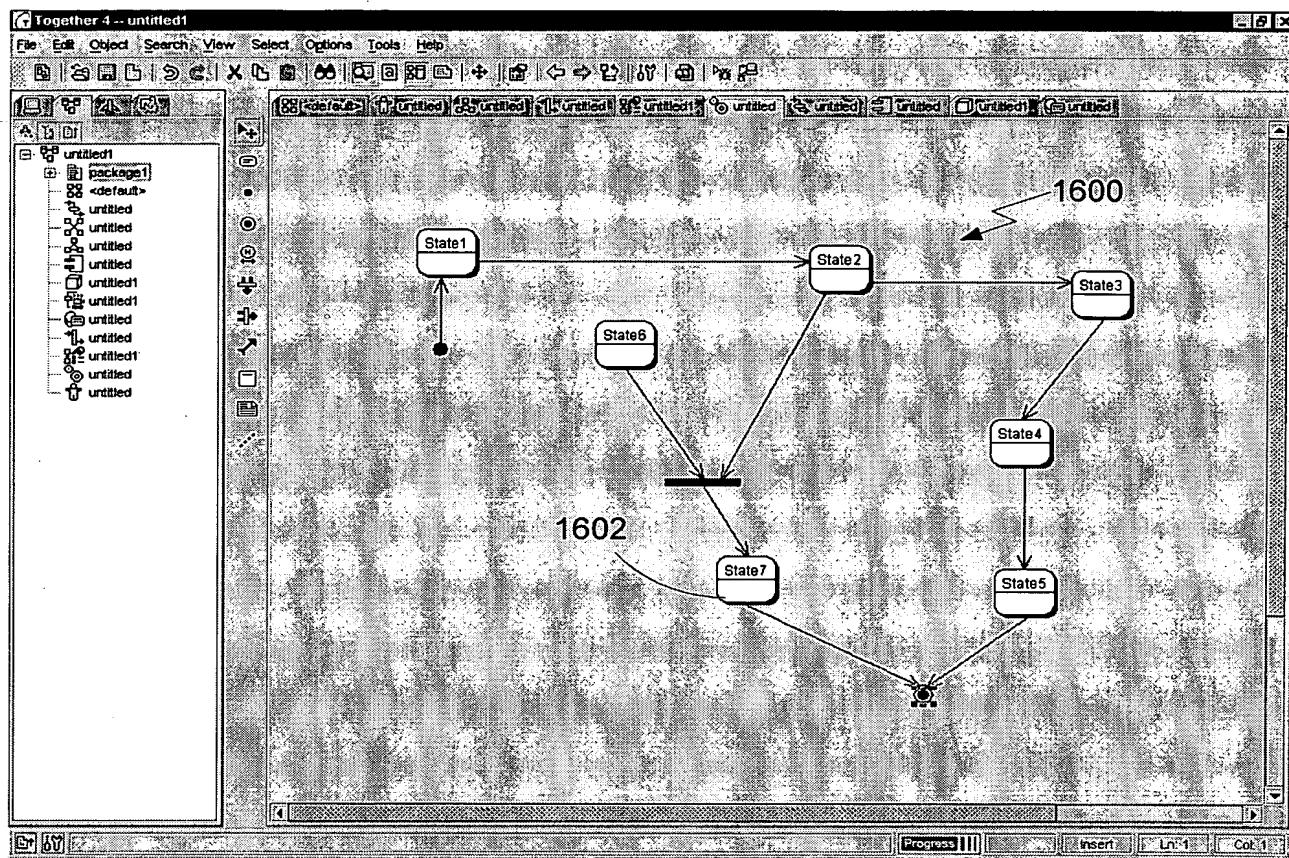


FIG. 16

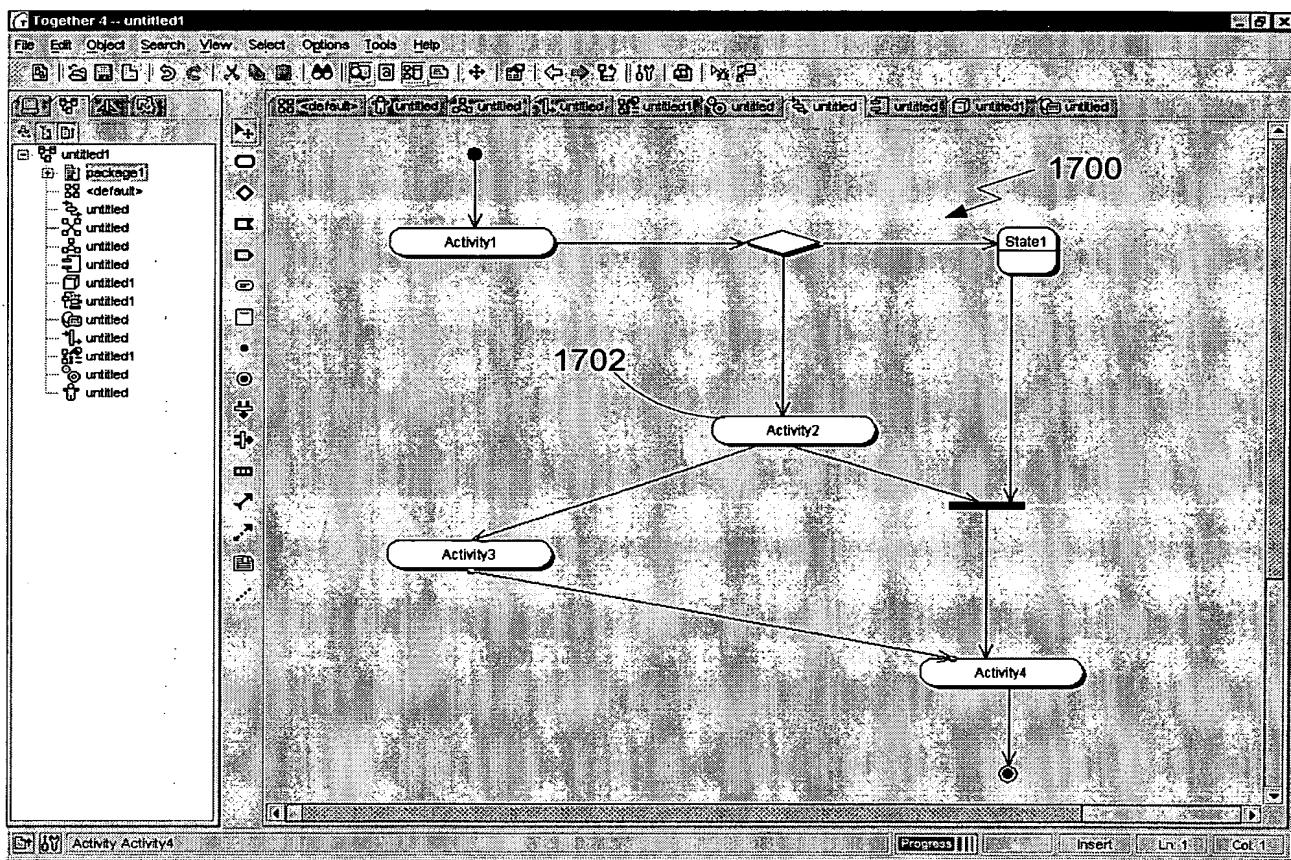


FIG. 17

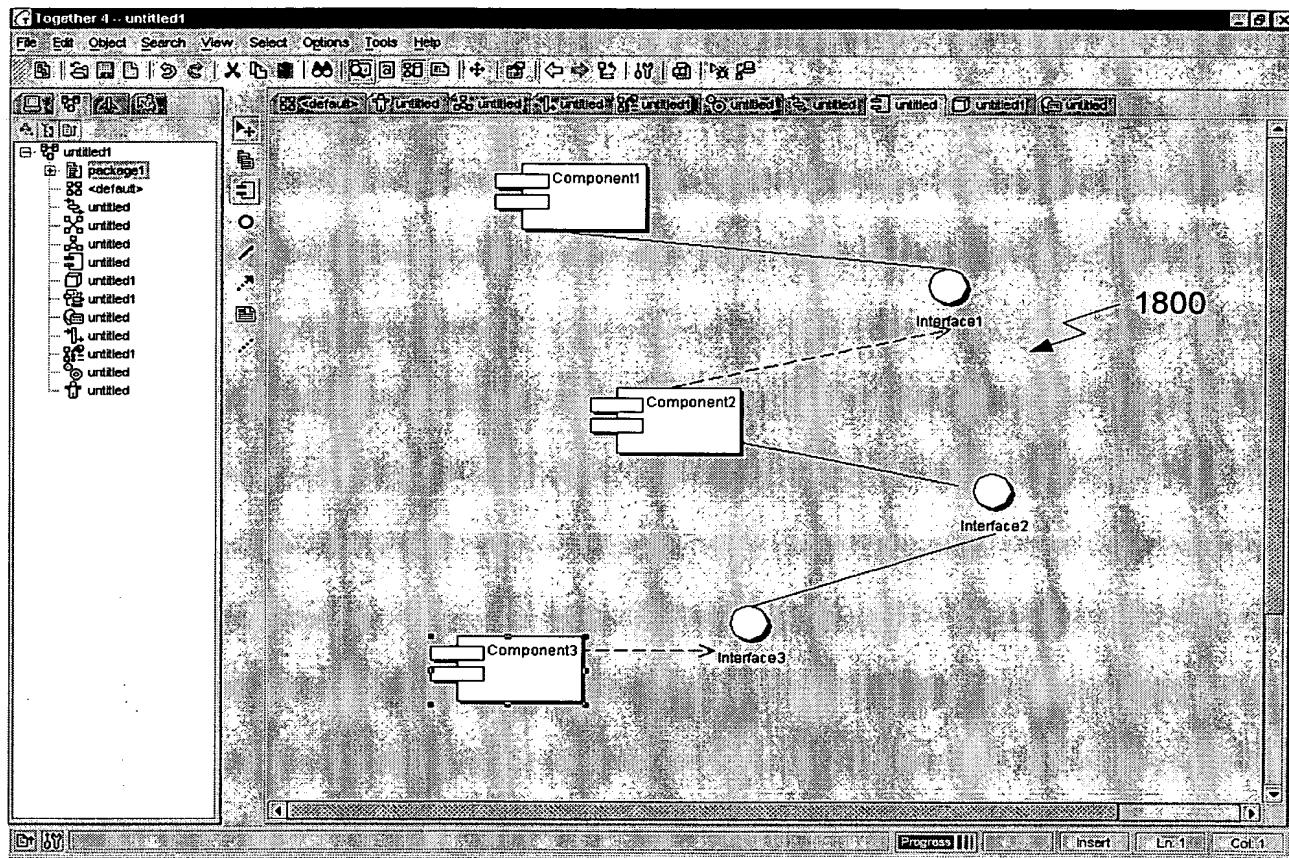


FIG. 18

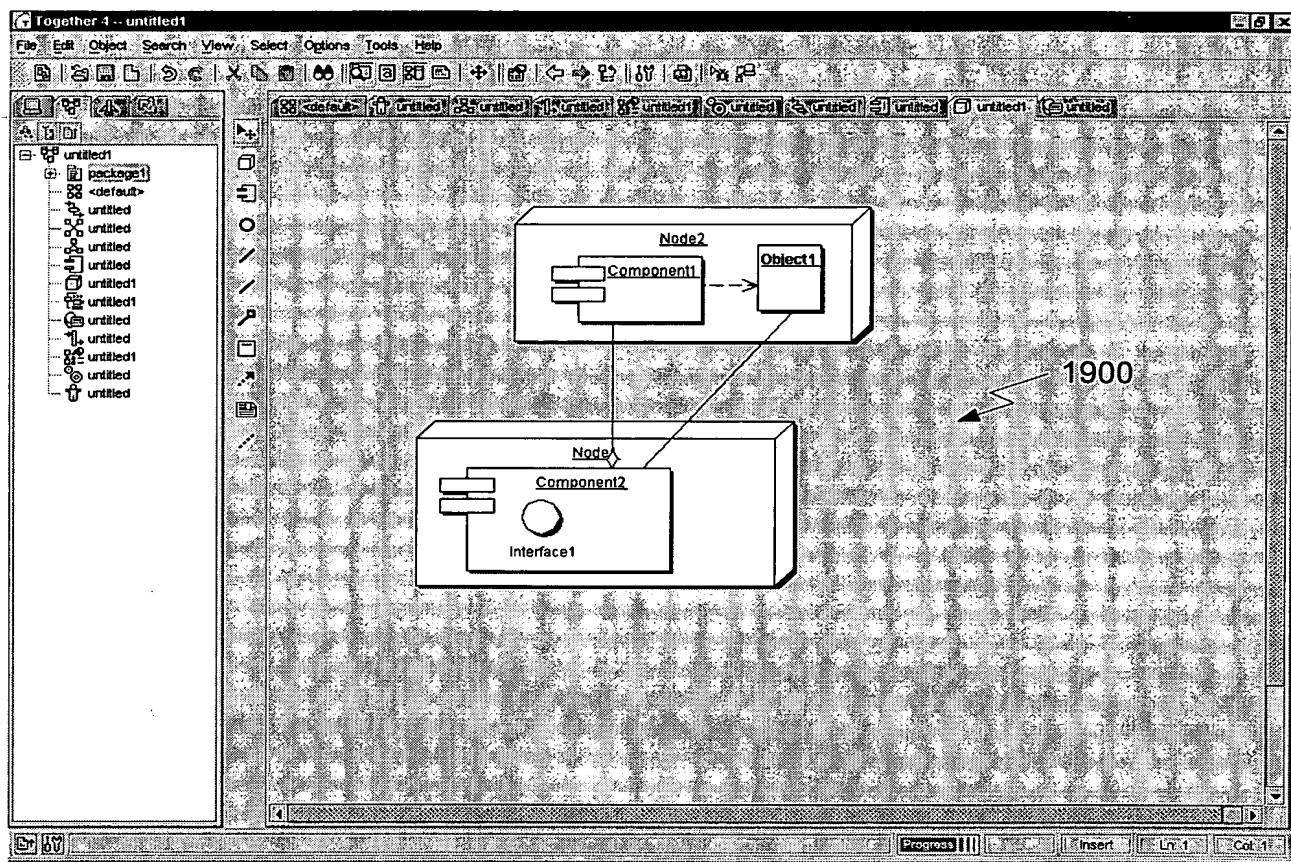
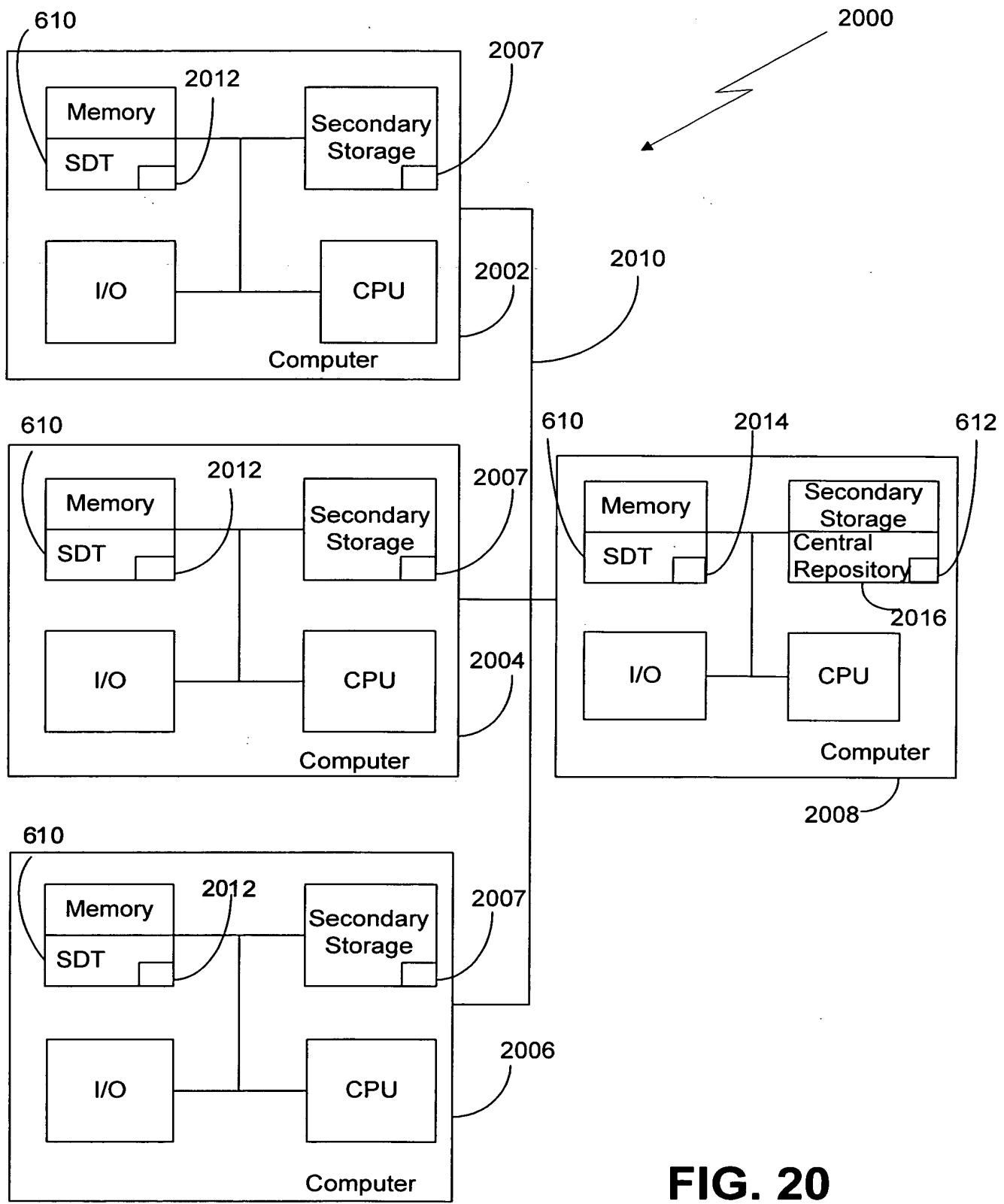
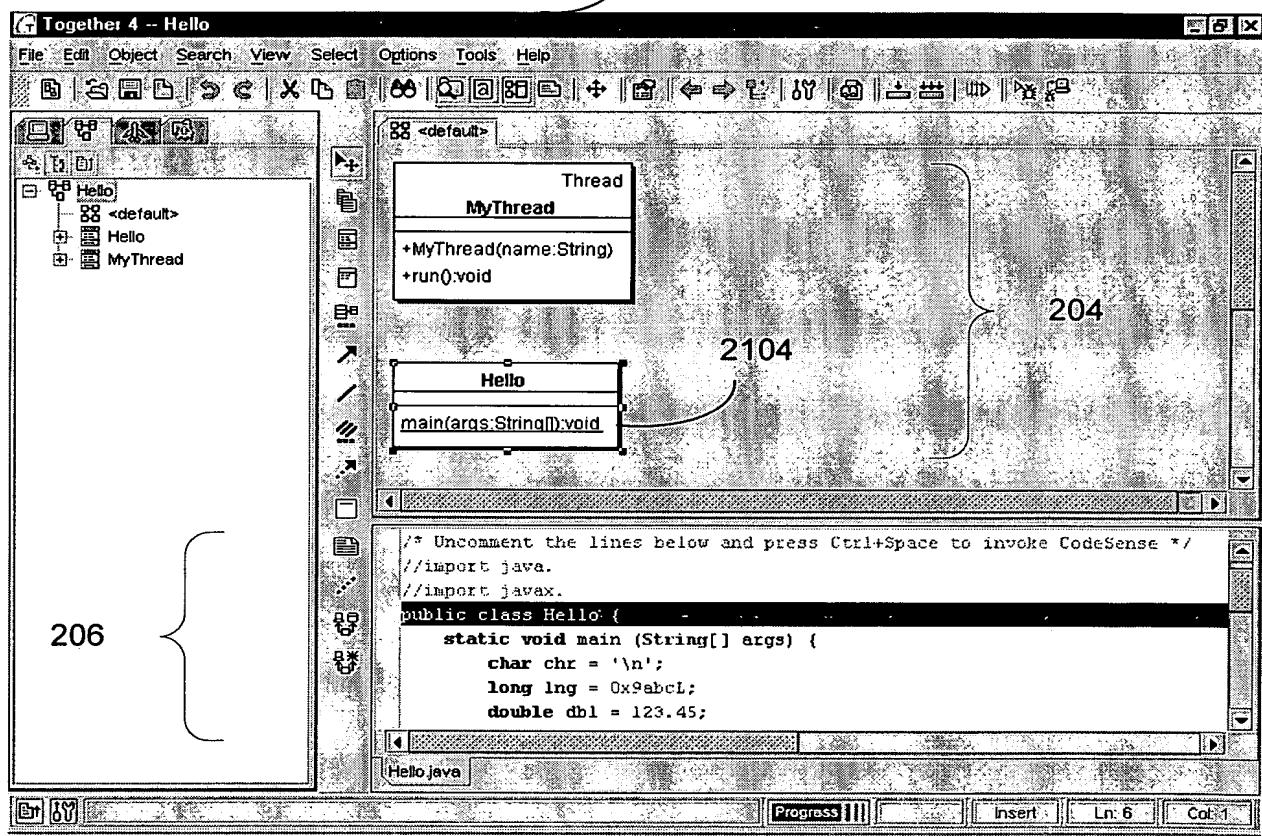


FIG. 19





**FIG. 21**

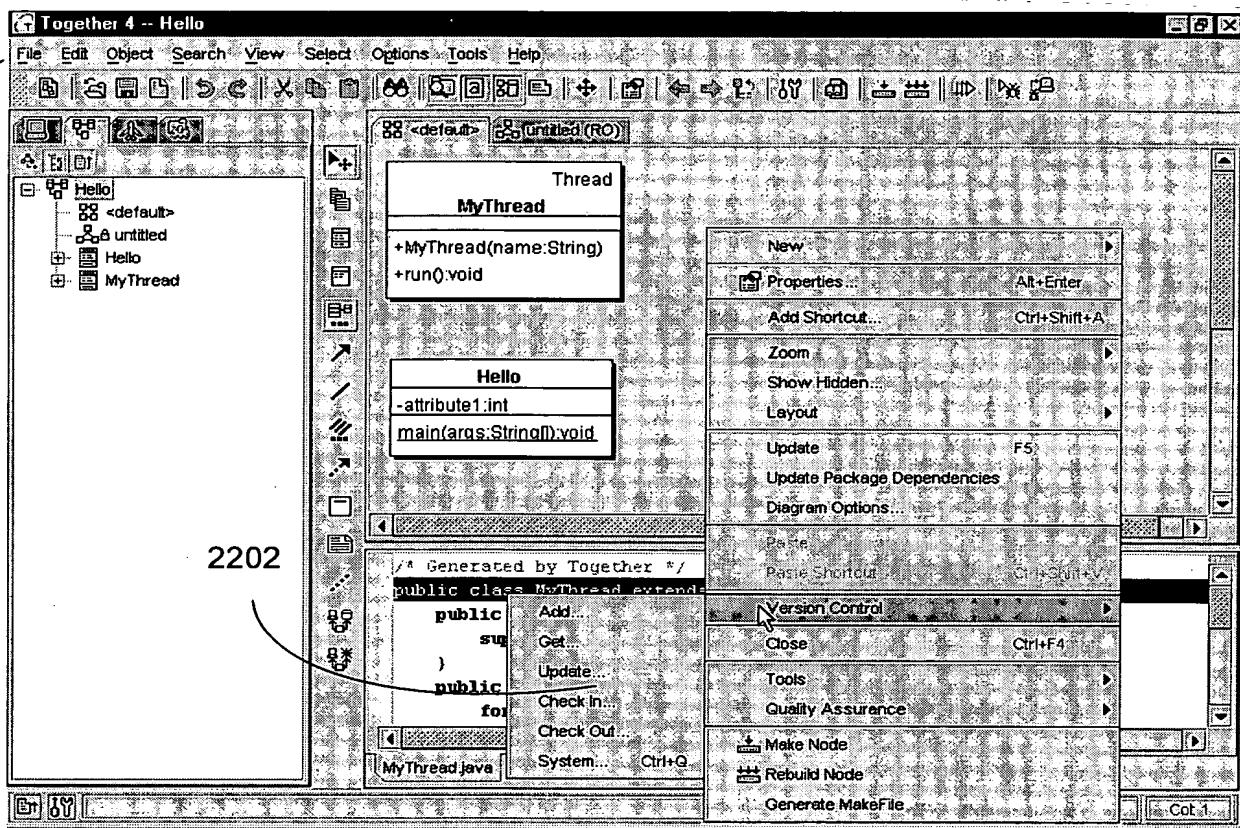


FIG. 22

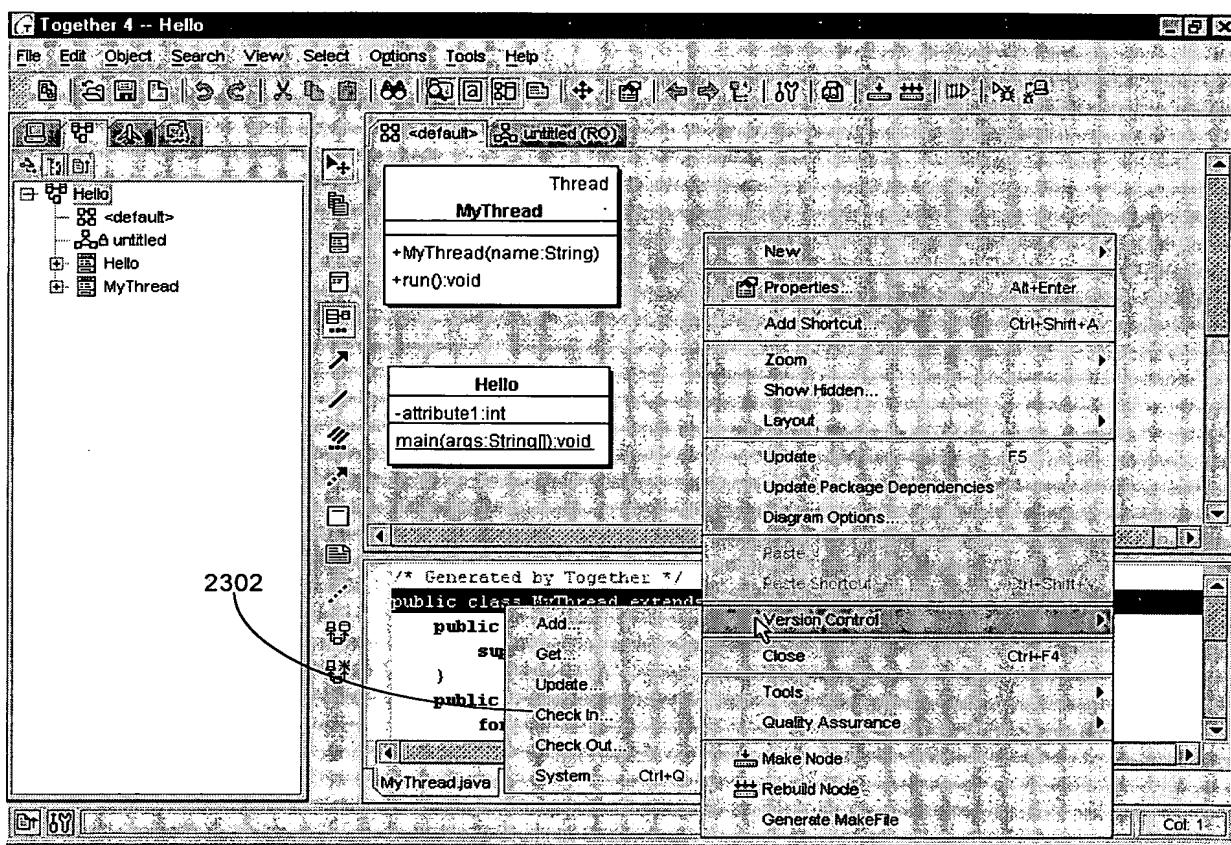
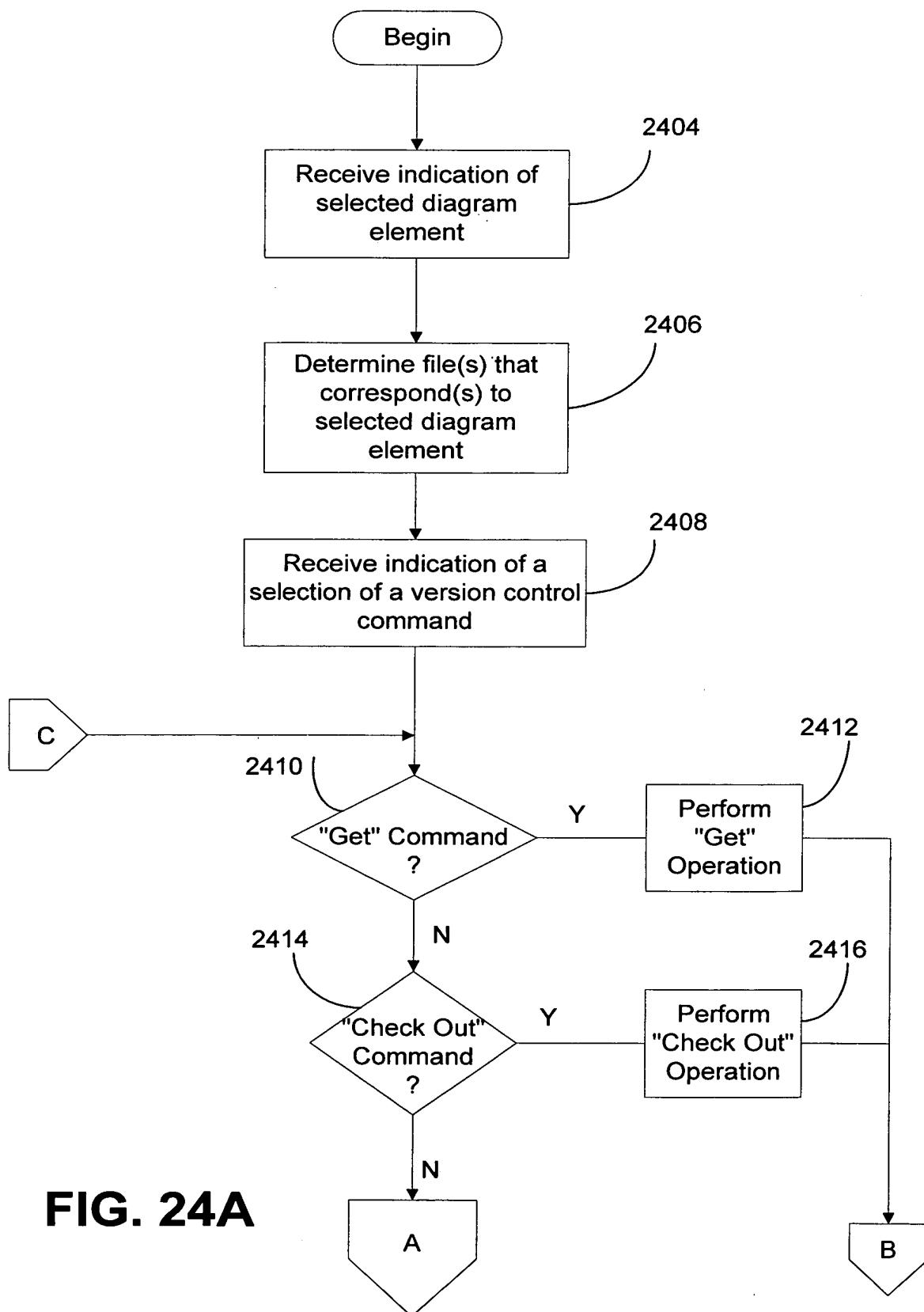
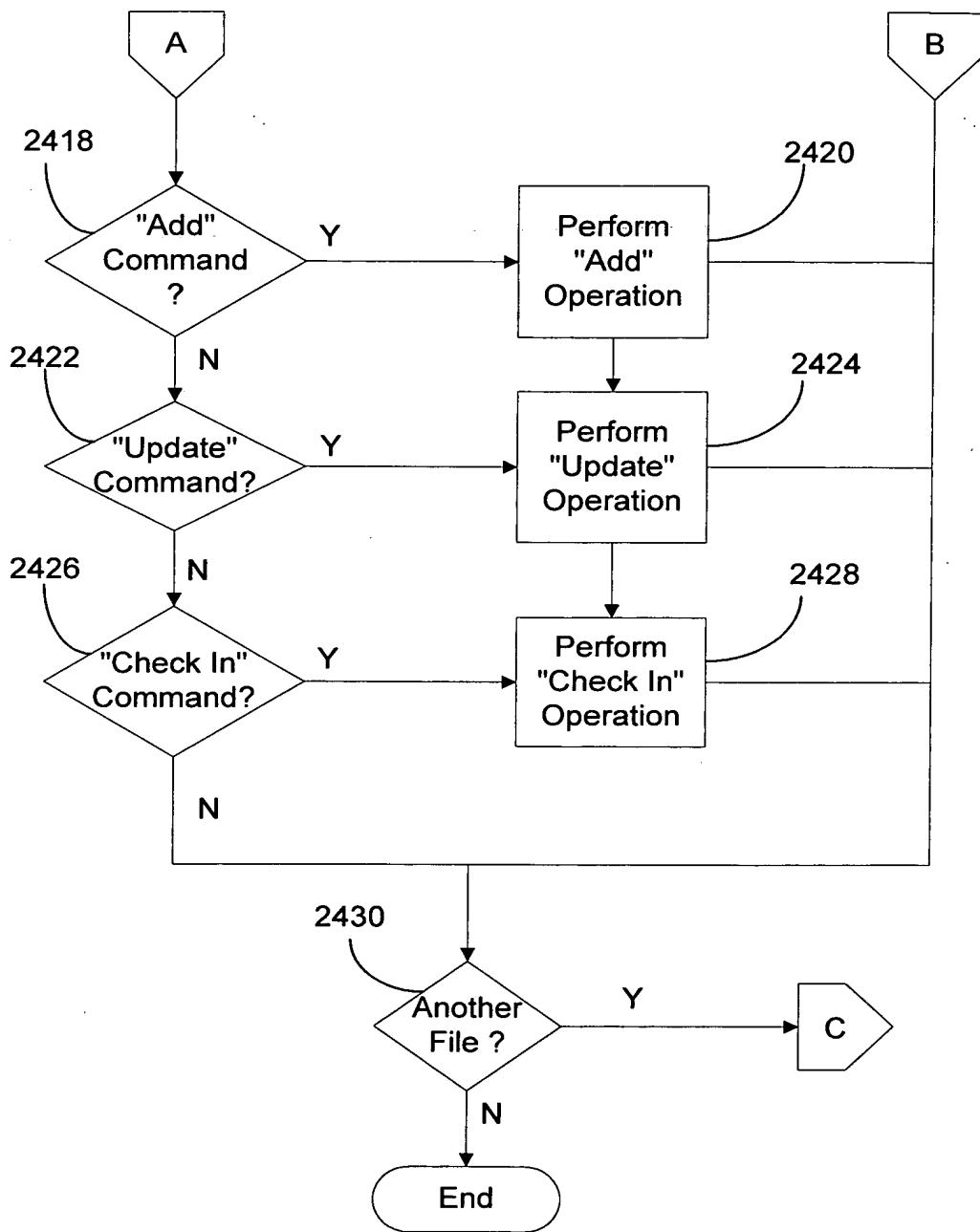


FIG. 23



**FIG. 24A**



**FIG. 24B**